

"ARTIFICIAL **METABOLISM**"

AN INTERVIEW W/ITH

NAM JUNE PAIK

by Willoughby Sharp

Willoughby Sharp: I wanted to start off by saying that a lot of people identify you with a kind of popular image, the "George Washington of Video." What does that mean to you?

Nam June Paik: A slant-eyed George Washington.

WS: Really. What do you think they think about... the father of a country? What are you the father of?

N.IP. Lam kind of an old man

WS: You're 50, aren't you?

Shigeko Kubota: No. 49

WS: When will you be 50? SK: July 20th, same day as Jackie Kennedy and same day as the moon landing.

NJP: Also Marshall McLuhan was born on that day.

WS: What is your background?

NJP: I was born in Korea, in 1932. My English isn't very good. John Cage said I better publish my book before it improves. (Laughter)

WS: You've made a career out of your

bad English Ok, so how do you give the reader a quick passage from 1932, in Seoul, Korea, to 1982, almost 50 years, to Mercer Street, in New York City? What are the highlights of that? Is there any part of that you want to share?

NJP: One New York image that I will never forget is during wartime in Korea, WWII, you see. The Japanese propaganda magazine said that the reason America will capitulate soon is because of the energy crisis. The reason is that Ameri-

cans are so spoiled. The Japanese, who had no energy at all, could live in inconvenience and were strong, but for Americans, who had such a good material life, any energy disruption would be fatal. For instance, when no elevator comes in the Empire State Building it is fatal, whereas in Japan, with only a few floors, you can live without an elevator. It's the same as Mao Tse Tung's idea, actually.

WS: What idea is that?

NJP: Low technology.

WS: Re more specific?

NJP: The Peoples Army will engulf high technology. When you have no technol ogy at all, then you can survive longer. Anyway, that is not the point—this maga-zine wrote, and I read it in '42, when I was just awakening, with the Seoul spring, this magazine said, everything is so well heated in America, that American models wear just a fur coat and one layer of clothing, so that, when they go out, they just put on the fur coat.

WS: That's what the people in Seoul thought about people in New York City?

JNP: Yeah, well I read it, and I said, "Well, if that's all they're wearing, (what a romantic image), then I have to go there

WS: Paik, in what way is video revolu-

NJP: The problem is that the concept of revolution came from mainly the French and Marxist models.

WS: Which are characterized by? . . NJP: Steam locomotive technology.

WS: Oh?

NJP: Marx never telephoned Engels Understand? And then up to Adorno and Marcuse, it was generally a reinterpreta-tion of Marx, and Marx was basically French Revolution and English Industrial Revolution. He wanted an equitable redistribution of profit, which was created by steam engine. One of the conditions at that time was that the Western world had a monopoly on technology. The whole world was very primitive then. There was no competition with the Western world, so Western world had a technology monopoly, kind of low grade technology, yet it had a monopoly, and then, energy was quite cheap because most of Western peoples were slave labor, even French workers. Those were the conditions. All those conditions changed. Western countries no longer have monopoly of technology and people are well paid, and their basic needs are satisfied. There is nothing more to buy, practically speaking. In Marx, there were two elements—we are not equal, that's one; and the other is that the lower class has nothing to eat or wear. The lower people suffer from substandard living. And then there is absolute poverty. Now, absolute poverty has been eliminated. Even with food stamps you live better than workers in other countries. What remains is relative poverty. Still, there is a great difference of wealth and dignity. Someone can jet to Florida every week and

WS: Some people can't get a subway

not only that, they have to watch the tv commercial of the jets flying away everyday. Relative comparative scale is bigger, as the absolute scale is better.

WS: Be more specific.

NJP: If I were a welfare mother, still I can feed myself and have hot water. Yet, I have much less pride than French workers in 18th century who worked and produced their own livelihood.

WS: The gap between the poor and the rich is getting larger

NJP: Yeah, and so, the machine is replacing labor and whatever labor pool is left is the big Third World labor pool. The problem is that since we have everything, practically less and less things are needed. The only technology that grows is like video game technology, which nobody needs, because everybody has an icebox. We cannot increase our need in material level, it can be only intellectual or spiritual

I read in the financial section of the London Times, by an economic professor, he said by the end of this century only 3% of people will work, and they will satisfy most of our basic needs. So, problem is, what does the 97% do? I gave this ques-tion: "What do you think? If you are 40 people, and only one of you has a job, and he can make you all happy, because he will give you clothes and car and food, then what will the other 39 people do?" I asked this question at the Ecole Superieur in Paris, and one guy stood up and said: The 39 people will criticize what the one guy is doing." I just burst into laughter! Only in France. But he had a truth

Now, my robot . . . generally people say that robots are created to decrease people's work . . . but my robot is there to increase the work for people because we need five people to make it move for ten minutes, you see. Ha ha.

The robot is not replacing five other people's work: it increases the work for five people. So, information is not anymore a means to convey something. Information becomes the substance of consumption. When you think, what is our basic need: food, eating-that is very easi ly satisfied. The physical limit is reached very fast. Dress-your basic needs are very easily satisfied, even Jaqueline Kennedy Onassis. And then.

WS: What about sex? That's more than



NJP: That has a physical limit.

WS: That's very easily satisfied if you're fed and clothed. (Laughs.)

NJP: But still there is a cartain limit. Fourth is alcohol. Alcohol, even drugs, have physical limits. But only in gambling and in information is there absolutely no limit. Information needs are limitless

When I went to college, there was no Xerox machine, eh? I didn't feet too inconvenienced not having one. But, now, in the current generation, going to college means shuttling between Xerox machines. That's all they do.

WS: And computers.

NJP: Same thing. Also, until you come to New York you don't really need that big Sunday New York Times Magazine, but once you're hooked onto it, then when you go to Los Anglest, he first thing you miss is it. A guy I met, he said since his mother and father didn't buy Playboy magazine, the first time that he felt sex was in the New York Times Magazine.

WS: Those women that were naked under those coats in the Sunday Times Magazine section.

NJP: Of course

WS: What do you want to say next?

NJP: How does information breed information? I call this "artificial metabolism," like an artificial intelligence. In a classical metabolism you eat and digest and move and procreate and shit out. That is the limit. That is easily satisfied. In artificial metabolism, which people are developing, like a secondary metabolism, there is no limit to consumption. The only way to come out of recession is for secondary metabolism to be increased.

WS: What do you mean?

PAIK'S FAMILY IN 1931

JNP: The information business, you know. So, my contribution, or a video artist's contribution is that we did create substantial software, which has been neglected by main-line programmers. We also create a market: not all intellectual people's energy got wasted for terrorism.

WS: Our use, in the early '70's, of the 3400 Sony port-a-pac helped establish it as an educational tool.

NJP: Of course. I keep saying that to Sony. (Pause) Also, it helped get your back in shape because it was so heavy.

WS: If Sony paid us \$30 an hour for all the work we did with that machine, they'd still be getting a bargain.

NJP: Of course.

WS: When I was taking my Sony portapac around to colleges and universities in '73 I thought it was just normal, but when I look back now, I realize there was no ne doing it. In the early '70s, most of the colleges and universities didn't even have any video equipment.

NJP: When I was in Stoneybrook, when I was attached to the Educational Resource Center to try and develop new technology in 1988, they were completely into million dollar machines. They just laughed at my little Sony. When I brought the first portable AV 5000 color Sony machine everybody at WGBH-TV, Boston, everybody said, "Oh, that's junk!" I mean, that's engineering tops saying that!

So anyway, we must talk about developing artificial metabolism—that is the only way to create new jobs for young people.

WS: What does that mean?

NJP: That is creating spiritual and intellectual need, through information. You see, when you have a good toilet, good wife, good food to eat—there is no expansion. You got it all.

We should talk about example first, instead of principle, when you are too new. There is that great young Fluxus artist, Tomas Schmit, and I visited him in Berlin.

WS: What year?

NJP: Oh, about '66. He lived in a third or fourth floor walk up, which has only cold water running in one room, and then, if he go to bathroom, he go all the way down to use common bathroom in the courtward.

Anyway, what I'm saying is that material wealth is relative, you know, but, even in America, and even in the bad buildings in Harlem, you still at least have hot running water—yet, they don't leel good. Whereas, Tomas Schmit, young poet, doesn't mind climbing down five floors

Illoors.

Another way of saying what artificial metabolism is all about is that, in Japan, they have highest quota of video cassette, recorders, ok, but in Tokyo maybe one third of the buildings have no indoor plumbing. So then many people who have no indoor plumbing have a brand new cassette recorder.

MARX NEVER TELEPHONED ENGELS"

They have a very good pick up service of the shit. So this artificial metabolism against natural metabolism is a very fine game. They are quickly skipping all those material improvements to go to information.

WS: Okay, I'm going to give you an example of something that interests me and you can tell me if it has any relevance to what you're saying. After Intel developed the first microprocessor-a computer on a chip—the 40004, soon Texas Instruments jumped into the game and an-nounced that it would "leapfrog" the industry with the 64K chip. After spending tens of millions of dollars building a plant in Arizona to get the perfect, "clean" environment necessary for mass production, it shocked the industry, closed the plant, and announced that it could not produce 64K chips profitably. However, just recently, T.I. said they were resuming production from their Japanese plant. You see, only the Japanese seem to have the craft and the meticulousness to be able to accomplish producing these new technol-

NJP: Sometimes being small is very convenient. I mean simply that when you make microching, delicacy is the most important. Energy is not the issue. The finger must be very thin. Physically speaking, the thinness of the finger is important. When I saw them making the vidicon for color camera, it was 15 to 18 year-old girls doing it, with the best vision. They said they have almost zero dust level. I was impressed.

WS: One of the things the impresses me about you is that you have a rare ability to combine both. You're a very wise person, on a very interesting level. You look and see. And absorb, and make very acute judgments. You have done so much in this country, and very you were born in Seoul. One of the reasons that you are unique is because you have this combination Eastern and Western swithesized vi-

Half of America's Power is Black (because

sion. You have been critical of your own society, and you have read Marx, Engels, and all the other guys, and you think a lot, and you read the New York Times daily . . . (Everybody laughs.)

NJP: Also I read New York Post. "Page Six" is my favorite. Yes, I think I ought to be editor of "Page Six." I can do a good

WS: What do you want to actually do? When you're dead, right, and I say "I saw Paik around a lot and he was in my Lumininism Show of 1967, and he did this and that, consultant to the Rockefeller Foundation on video and I missed his performance at the Kitchen, and everyone thought he was a pretty good guy What am I going to think about? What do you want to leave? What's the difference in the world going to be that you were

NJP: I think my job is to leave a book on Chinese history which I will be writing im-mediately after the Whitney Show. I have finished half, and I gave this to a German publisher and they are almost likely going to print it. I have been reading a Chinese history book for twenty years called Ssum Ma chen. Professor Burton Watson of Columbia University published a partial translation in the '60s. It's "Idea for Idea"-I printed this in the Fluxus Newspaper in 1964. The fetishism of idea, you know, which is a basic thing in this century, well in this post WWII generation, and, in this sense, most Americans are more advanced evolutionarily. Somehow, Americans are more . . . cerebral, more brainy.

And very cool. The reason John Cage got loved so in Europe is because he is a real American-no emotion. I was taking a plane trip from Calcutta to Cairo, and I saw that only one reading lamp was on, and I saw that a girl, a young girl who looked American, was reading some kind of paperback. I still remember that image. Everybody was so tired from flying that they were all trying to sleep, It was the old days, '56 I think, with prop jets. It took a long time. I thought this girl is really an artificial human. She's not tired at all. And reading, most likely science fiction, at midnight, alone. I thought this was really an artificial human. A girl who is made only from brains and nothing else is born The psychological impact of this is, for me, very strong, and I was very proud that I printed the words "fetishism of the idea" in Fluxus magazine in 1964.

These days I often meet young com-outresses, and I imagine they bleed monthly, not in liquid, but in tape.

WS: But, what do you mean to say with this woman reading this book on the

NJP: This is artificial metabolism.

WS: I see. (But still not really understanding.)

NJP: One artistic revelation-enlightenment-for me was just after Tinguely did his Homage a New York, in the early 60s, before I came. He did it at the Museum of Modern Art, and then John Cage wrote me-I was in Europe, had never been in this part of the con-tinent—and he said, "I enjoyed this Homage a New York by Tinguely very muci, but it still had one common European failure, which is it had only one

WS: Center?

JP: Yes, The whole aesthetic had one

center, whereas John Cage's music had many centers.

WS: What did he mean?

NJP: One zero point, one focal point. I clearly remember (although I lost the let-ter) he said that he enjoyed the show very much. He was very complimentary. However, he said it had this "one-centeredess " When Stockhausen made his first trip to America what impressed him was no center, just space. He wrote his orchestra piece "Carre" on the airplane fly ing over Texas and Los Angeles. Over this enormous plain. This is very American The lack of a center is very important

NJP: Well, I had a performance career, which was actually very successful, and I thought that I would make a change and include visual materials since that was there anyway.

WS: So you were extending your performances? Was there a sense of selling the

NJP: Yes, of course, I even printed that. What I printed in de Collage magazine is what Arthur Miller said in Death of a Salesman: "In capitalist society the only thing which I possess is that which I can So, of course, I knew that by the

WS: So Stockhausen has a lack of a

NJP: No. He tried in that piece. "Carre." to make that vast space - spaced-outaesthetic. And, of course, Jasper Johns' canvases share that quality, even the small ones have no center. Yes, And Pollock, And Merce Cunningham

WS: I have to interrupt. I want to know some specifics. When did you have the show with the television sets in Wuppertal?

NJP: '63.

WS: Okay. Say something about that. You are credited with introducing "video art" in that show. You had a couple of televi-. I didn't see the show . which you did I don't know what with. Why was that show in Wuppertal important as far as the video revolution goes? What did

time I was a little known. Many of my friends, like Mack and Piene, were relatively well known, and financially well off, whereas I was completely dependent on my family's monthly pay check. In Germany, in seven years, I made 150 DM in the theater. (Everybody laughs.) If you are over 30, you are supposed to make some money. If all my friends were doing okay, so should I. (Laughing.) It didn't sell for a long time.

WS: You showed 13 TV sets?

WS: Where'd you get the TV sets?

NJP: I bought them. I bought one from my landlord, and then I bought twelve from one source—a guy who was export-ing used tv's to Holland.

WS: So what did you pay for them?

"Information Needs Are Limitless"

NJP: I think very cheap, 50 DM each.

WS: Was that 13 pieces or one piece?

WS: What did you do to each of the

NJP: One I did horizontal modulation . . .

WS: Yeah

NJP: Then to another, vertical modulation

WS: Then you tried to understand what was happening electronically in the television set?

NJP: Yes, I had an engineer's help, and I even paid him. Pretty hard time. Not only you live without earning a living, but you bought all these tv sets plus paying the engineer, so it was hard.

WS: There is something very important here, that I think very few people understand at all. I just understand it now, and it seems, to me, to be one of the major parts of your, or Bell's, or Edison's or Telsa's, or Armstrong's, or any inventor's work, that there is the actual manipulation of the electromagnetic spectrum or the use of it as material that is innovative.

NJP: Yes

WS: Now most people that think of you, think of a person who made the best sell-ing video tape. Global Groove; but what analysis has been brought to your work? What you're telling me is that you actually took a found object, a television set, and did more than present it as a given object. which it sort of looks like, right?

N.IP. Mmmhmm

WS: You got into the very mechanism of the tool itself and tried to deal with it and then tried to demonstrate thirteen different aspects of its character.

WS: Now, where is that said? Does anyone understand that there is something in your art called invention? (And is about to say "prepared," when)

N.IP. Yeah, When John Cage was a student of Schoenburg, you know, formally studying, he said to Cage: "You are not a great composer, but you are a great inventor."

WS: Do you identify with a tradition of electromagnetic contributions from Faraday, Maxwell, and Hertz?

NJP: Yeah, of course.

WS. And Marconi and Tesla?

NJP: Of course, Marconi is very impor-

WS: Do you know that Marconi started his own company when he was in his twenties, and he raised all this money around one vision-communicating human intelligence over the spectrum? He was going to send an electromagnetic wireless radio signal across the Atlantic Ocean. Everyone thought it would shoot off the face of the earth because of the curvature. They didn't know anything

of the music), and Half is Nuclear Power

about the ionosphere

about the ionosphere. We've digressed, but I'm glad we got to the inventive side. What really interests me about this show with the thirteen television sets—and I just saw a photograph of it—is the sense of inventiveness. Tell us more about the thirteen television.

NJP: One was just one line TV which became The Zen for TV.

WS: A straight vertical line, reconstructed in Cologne '74.

NJP: Yeah, but that really was an art piece which I didn't make but it became. That particular set had another kind of preparation, then when we moved from Cologne to Wuppertal it broke down and became only one line. So I just set it 90 degrees this way and it became a beautiful altar object so then . . I think I remember Gunter Vecker, and then Beuys came back very late, around 10 o'clock, and they stayed a long time watching this one line. This one line is easy. Another one is vertical deflection manipulation, and then horizontal manipulations. I found that all the basics for my video synthesizer were there. Actually I discarded the first half. And also, I discovered that it is much easier to attack the scan system itself than to try and put something interesting on video circuits. In television you have two decisions—scan system which makes raster, and then which information to put in. Since I didn't own a tv camera, and a videotape recorder cost half a million DM at that time, I didn't even think about it. And then there was the 5000 DM Grundich cameras-it was surprising, I thought, "Well, 5000 DM, it is now reachable." But before that first, we fed many signals to video circuit, and then because we were doing many audio feedbacks we tried feedbacks, so we fed and didn't work. Then, I was studying tele-vision circuits and I said, "Well, let's put something into vertical deflection." And, then, this fantastic thing come! And then horizontal. Really, very good stuff, All what you saw, the computer companies did in early TV commercials. You know, bbbbberrrrupp. Early seventies commer-cials. It was all there. And then actually, I published in 1965. I thought that my work was really not very well received, and I thought that somebody may come later, so in the New School brochure I published every circuit very scientifically. And then I sent it to the Patent Office to get it patented. And, oh yeah, a very important, serious painter said to me, have read many artists' essays, but yours is the first of which I have not understood one word." (Laughter.)

WS: Your sense of what telecommunications does to change human beings is very special. What do you say about that? Because of these electromagnetic tools, because of television, and computers, and video discs, and the rest, we are actually changing our metabolism, our actual

Now, our intelligence is being conditioned by the quick cuts of commercial TV. And our time sense is being conditioned by the fact that we no longer think in terms of minutes, we think in seconds.

NJP: Yeah, condensed.

WS: And our sense of being here, on this planet, is conditioned by our sense of see ing satellite photographs of the whole sphere, one little bundle. .INP: Oh. ves.

WS: And these are major factors imploding on human consciousness. I'm interested in your perceptions of what is happening in that general domain.

NJP: You know that there is an interesting anecdote. When the trans-Atlantic cable was made in the late 19th century, the distance between America and Europe was six months. With trans-Atlantic cable, it became one second. And when Napo-

were being discovered: "No. We are not discovering many new things, we are just discovering new relations between things that are already existing." Yery analytical. And that is a continuation of the constant new relationships being woven between strangers. And then there is more and more software. That is perhaps how the economy will survive. Mr. Reagan wants to rescue the economy by making more and more guns. All is defense spending, nothing but an attempt to revive the economy through old ways. America went out of a recession after World War II by

wood. In that case, America's multi-ethnic society is very good because American capital can tap into every. . . .

WS: Do you find America much more diverse than Japan?

NJP: Oh, yes. Even more than Europe,

WS: Now there is a great fear in America against the Japanese. M's almost as if in 20 years America could end up like Poland. This seems very real when you look at robotics, and who controls robotics, yiede discs, the 256K chip, automobiles. "You talk about Hollywood's software—who the hell is going want to watch that in ten or twenty years? Nobody! They better squeeze every nickel out of it now, because soon we are going to have "intelligent television," interactive via satellite, live DBS. And the cable companies better get theirs in the next few years, because they are going to be swept away by de-regulated AT&T and direct-to-home TVRO.

NJP: I'm generally more cautious.

WS: You are?

N.IP: Yeah

WS: Things have moved very slowly over the "70s when we expected a lot more. I think in the "80's a lot of those expectations (and more) will really expand. I definitely see an artist-controlled communications satellite this decade, maybe by '88.

NJP: Yeah.

WS: That's an alternative art space, right? As soon as artists have a satellite, they have their art any place it could want to be. Then we will see what the market is.

NLPT. The biggest cultural impact of this century is that African music went through the heart and mind of everybody through American media technology. That has changed the whole century culturally. Russia can never invade the Western world and stay three days without rock-fn-roll music, but America can invade Russia and stay forever as long as they have rock-fn-roll. Understand.

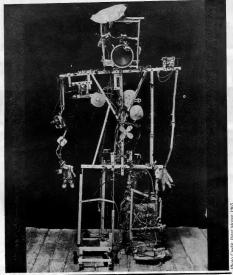
WS: It's irresistable

NJP: America owes so much to Black people because half of American power is black power (because of the music), and half is nuclear power. But you can not take and occupy with nuclear power, you can't govern them. But you can with rock. You don't even have to attack, you just infiltrate. Of course. The more the new technology takes hold, the stronger American and black influence will become Orientals can make cheaper, or better hardware, but hardware can not really seep into your heart and mind. It's the software that does that. So now America is cutting social budgets in favor of defense budgets, but they should consider the social budget for black people as the most efficient defense budget. (Everybody laughs.)

WS: Do you look forward to satellitereceive television?

NJP: Oh, yes. I think that when we get satellite dishes that are so small that they can be hidden and we can watch American TV worldwide, then the Soviet Union will collapse in ten years.

"My Robot Increases Work"



leon sold the Louisiana Territories to America, President Monroe was the Ambassador to France. He didn't have time to ask his President, so he decided on his own. "I buy." (Laughter.) Another story is that Henry Thoreau, the famous writer, said, "The telephone companies are now wiring Tenn. and Malies, what are they going to say to each?" So information breeds information, you know? And so it is with the telesphere.

WS: I call it the "Teleculture."

NJP: . . . A new relationship will be woven. The French mathematician, Jules Henri Poincare, said, in response to the general observation that many new things

ancy between consumption power and production power. Now with the computer it is one to a thousand. So the easiest way to get out of this recession is to make more guns which is a fictional demand that does not exist. But that will be only a temporary solution. The long-term solution is that human beings educate human beings so that they really consume more. And we have nothing more to consume in material life, so we have to consume on the mental and intellectual level, and telecommunication is the best tool to increase that. And, although the Japanese make very good hardware, all the soft-ware is being made in America, in Holly-ware is being made in America, in Holly-ware is being made in America, in Holly-

increasing its production capacity. Marx

depression (and then panic) is the discrep-

said that the only reason for economic

"The more the new technology takes hold, the stronger American and black influence will become"

-Nam June Paik